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SPECIAL ARTICLES

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TORONTO, OCTOBER, 1927

No. 10

County Health Work in the Province of Quebec*

DR. ALPHONSE LESSARD

Director of the Provincial Bureau of Health, Province of Quebec

IT is a real honor to me and for which I am very indebted to you to be your guest at this luncheon of the Canadian Medical Association, and you may rest assured that I conveniently appreciate it.

Your kind invitation is in my opinion, one more step towards a better understanding and the promotion of better feelings between the two races which have built our beautiful country, and towards the conception that all of us being on this land of ours to stand, to live together, and to keep in the future the different qualities which have been in the past our characteristics. It is of the utmost importance that we visit each other frequently, that we have friendly talks between us, and, in the field of medicine and public health like others, we speak of our different activities and so learn many things from each other, for the benefit of our populations.

You have asked me, gentlemen, to say a few words about a new organization which we are trying to implant in the Province of Quebec in order to promote public health, the County Health work. We have not the pretention of having invented something which is very new and very big. We are only trying to apply to our population, according to its mentality and characteristics, what we have seen elsewhere and what we do believe will be a success as it has been elsewhere. This simply is our object; and, judging by a few months experience, in one instance 13 months, we have the conviction that the system which we have adopted is one of the best, if not the best, as far at least as the rural sections are concerned, to eradicate the evils caused by so many bad hygienic conditions, particularly, tuberculosis and children's diseases.

If you allow, me I will give you a brief summary of our sanitary system in our Province, as a whole, and I will tell you afterwards, what is done in the six counties in which the units have been created so far.

*Read before the Canadian Public Health Association, June 14, 1927.

Provincial sanitary organization in Quebec, generally speaking, and as far as the technical services are concerned, is established on the same basis as in other provinces of Canada and most of the States of the American Union. General administration, Vital Statistics, Tuberculosis and Child Welfare Divisions and County Health work are immediately under the central direction situated at the seat of the Government, in the City of Quebec, while certain technical Divisions such as laboratories and sanitary engineering have their headquarters in Montreal. There is also in the latter city the office of the General Inspector, in charge of the 18 district Health Officers, who are supervising as many regions of the Province. The duties of these full-time men have been so far: to supervise the sanitary conditions of the population under their jurisdiction, to be the intermediaries between our Service and the municipalities, to see that the law and regulations are observed, briefly, to be our representatives among the population of their respective districts.

With the exception of the largest cities, there are very few municipalities in our Province employing a full-time Health Officer. Nearly all of them are general practising physicians, giving for a small salary very little of their time to their official functions. We all know through experience what is the value as far as public health is concerned, of the part-time man.

The result is that every one of our 18 district Health Officers has a wide territory to cover, a great number of municipalities under his supervision and a large population to protect. Some of these districts include 75, 80 and even 90 municipalities. You will readily understand that many of these are seldom visited by our officer, some once during the whole year and others on special calls or in urgent cases, for instance, during epidemics.

Moreover, he is alone to do the entire work and to look after everything; schools, public buildings, general health conditions and nuisances of every kind. The Public Health Nurse who is so indispensable in an organization of hygiene, is an unknown person in the regions looked after by our Health Officers; I mean the rural part of the country, because there are many of them in the cities, and specially in the 21 centres provided with Tuberculosis and Baby clinics created by our Service. Therefore, our officer is obliged to neglect a lot of things to which he could attend if he had the co-operation of one or more public health nurses.

The consequence is that the education of our rural population in hygiene matters has been a slow process, so far.

In 1925, I had the good fortune, as a guest of the International Health Board of the Rockefeller Foundation, to visit a number of States, city and county health organizations in the United States. I particularly

studied the methods employed there to solve the various health problems among the rural population, and in certain parts of North Carolina and Ohio where conditions are somewhat similar to those of our Province. I made a survey as complete as possible, of a system which after many trials, had been adopted and was giving excellent results.

This system is the "County Health Unit," and after having seen it functioning in the States and observed its advantages, upon my return, I submitted to my Minister the project of trying it in our Province, in as much as it could be adopted to our local conditions and to the mentality of our population. The Honourable the Provincial Secretary gave me entire liberty to inaugurate this new policy, and we began our work.

What is the County Health Unit system which we are presently organizing in our Province of Quebec? It consists in the establishment, in a county or in two small neighbouring counties, of what I might designate as a "Bureau of Health in miniature," composed of a full-time medical Officer, two or more Public Health Nurses, a Sanitary Inspector charged with the enforcement of the health regulations and with the education of the municipal Officers, together with a Secretary to handle the clerical work of the office which is generally located in the principal town of the county. The whole population of the county is thus submitted to constant supervision on the part of this staff. Health education is intensively carried on, a considerable amount of propaganda work is done continually, and not a single municipality escapes the attention of the Officers of the Unit. The Medical Officer covers all the parishes, meets there the civil and religious authorities, maintains cordial relations with local doctors, gives public lectures announced the preceding Sunday by the curé in the pulpit, has friendly talks with mothers on the necessity of pre-natal, post-natal and pre-school hygiene, visits the school and looks after outbreaks of infectious diseases. The nurses examine the school children and refer those defective in any way to the family physician, they give the teachers instruction in hygiene which they, in turn pass on to their pupils; they go directly in the homes of the people to make them understand the necessity of following the golden rules for clean and healthy living; they advise young mothers how to protect their babies or babies to be, etc. The Sanitary Inspector visits the municipal officers, assists the Secretary-Treasurer of the municipalities in the enforcement of the health laws, looks after water supplies, sewerage, nuisances, sees that quarantine is observed in case of contagious diseases, etc. The Secretary attends to the office work, handles correspondence, answers queries, keeps records, and one important matter, collects from all ministers of the worship, the birth, marriage and death certificates, makes corrections on them, if

necessary, takes a copy of each, and sends them to our Division of Vital Statistics in Quebec.

We have considered it advisable to establish five or six Health Units in as many counties of our Province for the first two years, as a demonstration, trusting that this system, wherever it will be fairly tried, will reduce, considerably the mortality from infectious diseases, tuberculosis as well as the infant mortality. In fact, instead of attacking only one phase of the public health problem as it is necessary in our cities, through the Dispensaries and the Child Welfare Stations, this Unit system attacks the problem in its entirety, takes up the whole question of general public health, with the expected result that, after a few years, the population will enjoy better living conditions, will take proper means to protect infancy and childhood, the period when tuberculosis is ordinarily contracted, with the consequence that this dread disease together with many others, will be checked and gradually eliminated.

Such a system costs money, but it has been said and said truly; public health is purchasable and purchasable with money. It is a matter of education, education of the governing bodies, and education of the people. And if the method proves to be sound as we hope it will, nothing will prevent its extension which will be requested by the population itself.

The minimum annual budget of a County Health Unit in our Province varies from 11,000 to 14,000 dollars. For the demonstration counties the Government has adopted the principle of contributing for half of the amount. It is our lot to find the other half, which is not always a small difficulty.

Fortunately, the Rockefeller Foundation has granted us a most generous help, and its contribution for the actually organized counties, amounted for the first year, to 25 per cent., and in one instance, to nearly 35 per cent. of the total cost. But, the Foundation, and rightly so, requires as a condition of its financial assistance, that the local authorities, the County Board and the independent municipalities for instance, do their part. On the other hand, it has assumed all the expenses incurred for the field training of the Medical Officers and Nurses appointed to take charge of the Units; and as a fact our staffs have studied during two or three months in the counties of the State of Ohio, for that purpose.

I may say that we have met from practically all the County Councils before which we have offered to explain our proposal, the most generous answer. They have voted a tax on the assessable properties of the whole county. I may be mistaken, and if I am, I will be glad to be corrected, but I am under the impression that this is the first example in our country of a rural population taxing itself for public health purposes.

May I now be permitted to say a few words about the work accomplished in the first county which we have organized last year and where a Health Unit has been in operation since the 1st of May, 1926. This county is Beauce county, situated about 30 miles from Quebec City, having a wide area, and a population of 45,000 people. Let me say en passant, that in December 1925, before the beginning of the organization, I obtained from the County Council, a first contribution of 500 dollars, with much difficulty, and only after an elaborate speech of over an hour. But, in December 1926, the same Council voted, after a quarter of an hour deliberation, 1,700 dollars as its share for the maintenance of the Unit which the mayors had seen at work during the seven months only. This is the result of the education done by our staff. I have on hand the report of Dr. Deschênes, our Health Officer in Beauce County. It deals with all the activities of the Health Unit during the eight months from May to December, and particularly with the co-operation obtained from the clergy, the mayors, the school commissions and the medical profession of the county. It gives special attention to the work done in the schools and to the meetings held in the various parishes attended by the young mothers. It refers to the lectures given to the 584 teachers during the summer vacation, to the 2500 children which were vaccinated against smallpox during August, September, and October, to the free distribution by the Provincial Bureau of Health of serums and vaccines to the physicians of the county, etc. The time at my disposal does not permit me to quote the report in full, but I think that a few figures drawn from it would be of interest to you. These are as follows:

Public meetings	19
Attendance	9,338
Specimens of hygiene literature distributed	13,047
Hours of work in the office and outside	6,921
Number of miles covered with motorcars supplied by our service	14,497
Children examined weighed and measured	3,003
Schools visited	95
Number of defects found in children	7,214
Number of advices given to parents	2,349
Cases referred to family physicians	2,767
Lectures to young mothers	54
Attendance	1,827
Lectures given to school teachers	30
Attendance	584
Public, semi-public and private water supplies inspected	47

Nuisances inspected and corrected	47
Public, semi-public and private sewerage systems in- spected	28
Hotels inspected	18
Butchers shops, bakeries and slaughtering houses in- spected	37

These are a few figures indicating only a part of the work done during 8 months in Beauce County by our Health Unit. And the work is continuing. One other Unit began to function August 1926, in the two neighbouring counties of St. Jean and Iberville which we deemed advisable to join together for the purpose, owing to their small area and population. And on the 1st of January 1927, a new Unit began its work in the county of Lac St. Jean, one of the largest of the Province and having a population of more than 45,000.

The neighbouring counties of St. Hyacinthe and Rouville through their County Councils, have applied for the organization of a Health Unit and have at the last meeting of these councils imposed a tax for health purposes similar to that of the first counties. The county of Montcalm has acted in the same way and the adjoining county of L'Assumption is going to follow at the end of this month. These two Health Units will be organized early this year and will function before long.

You would probably like to know what is particularly done in regard to tuberculosis control in the Units. One is provided with a tuberculosis and baby station which was organized a few months previously to the establishment of the county health Unit. This is at St. John's, P.Q., where are situated the headquarters of the organization for the two counties of St. John's and Iberville. The two organizations were combined and are operating under the direction of our Medical Officer there, with a Specialist in charge of the tuberculosis dispensary. Our Medical Officer and Nurses are tracking the cases in the two counties through the local physicians and bring them to the clinic for examination and medical advices. The same policy will prevail in the St. Hyacinthe and Rouville Counties Unit, where the same conditions exist.

But, in Lake St. John County, where there is no special tuberculosis dispensary, we have adopted the travelling clinic system. Once a month and during two days, according to previous arrangements, all suspected cases of two or three parishes are collected by the local doctors themselves, or sent by the parish priests in localities where there are no physicians, to a certain place designated in advance, and there, they are examined by the Superintendent of the Lake Edward Sanatorium, Dr. J. A. Couillard, with the assistance of our Medical Officer and our nurses,

and in the presence of all the doctors interested. So far, two clinics have been held during which the cases coming from six municipalities were examined, and before long, we will have consequently completed an accurate survey of the Lake St. John County, as far as tuberculosis is concerned. What we badly need in that respect, is an additional Nurse whose duties are to look after the follow-up work after these clinics are held and destined to render our efforts more effective. We hope to be in a position to settle the difficulty in the future. It is a matter of ways and means. Money! always money!

History repeats itself. What is now taking place in connection with the promotion of public health among the rural population of our Province, is exactly what we have seen regarding the policy of improved roads. At the beginning, many municipalities were reluctant in adopting that new policy and were not disposed to pay for its realization; now they are all applying to the Government for good roads, and they are offering to do their full share. I am convinced that the same will happen regarding public health, with, as a result, improvement of living conditions, saving of thousands of lives every year, prolongation of existence, and, in a word, the betterment of our population.

Gentlemen, I thank you sincerely for your kind attention. I tell you once more that it is with a great pleasure that I have come here and met you. We intend to create in one of our organized counties, a training school for this kind of health work, if, as I hope, we succeed in securing the necessary funds to that effect. When this training school is able to stand up and function properly, I hope you will do us the pleasure of coming and visit it. You will see then our staff sincerely and devotedly at work, a fine piece of country, and a brave population of true and die-hard Canadians.

The Place of the Public Health Nurse in Epidemiology*

By MABEL F. GRAY, R.N.

Assistant Professor of Nursing, The University of British Columbia

THE Field of Public Health Nursing is every day broadening, and in no field is any more interesting and more worth-while work awaiting the nurse than in the field of epidemiology, and in no field is the nurse's training in careful observation of symptoms more valuable. The aim of the present paper is to indicate some of the ways in which the services of the Public Health Nurse may, with excellent results, be utilized in this field.

Epidemiology is the "science of epidemic diseases," and it is usually thought of in connection with diseases caused by living organisms capable of rapid multiplication in the human body and with those diseases which, by analogy, are assumed to be due to similar organisms, though the definite organism has not yet been isolated. To this group belongs, German measles, to which disease we shall give special attention to-day, as affording an example of the nurse's work in this special field.

In dealing with communicable disease the epidemiologist has three objects:—

1. To prevent the spread of disease—with its consequent untimely death or serious complications or sequelae and consequent physical or mental handicap.
2. To minimize the loss of time to all involved—both the patient and contacts.
3. To minimize the expense—to the patient and contacts, and to the state.

The field epidemiologist is concerned in studying every aspect of each epidemic disease, thus gathering data which will establish such facts as:—

1. Source of infection.
2. Earliest signs or symptoms of the disease.
3. Period of infectivity.

The information thus gathered will assist materially in the early detection of cases, and also reduce to a minimum the isolation period for

*Read before the Canadian Public Health Association, Toronto, June 13, 1927.

the patient and the quarantine period for contacts—and both without endangering the public.

When the epidemiologist has made his study and carefully tabulated his data, and periods of isolation and of quarantine have been fixed by Public Health authorities, it remains only to carry out such routine measures as:—

1. Securing data on each individual case as a means of gaining new information regarding any particular disease.
2. Instruction of the patient or of those in charge of the home as to isolation measures.
3. Observation and instruction of contacts, and the tracing up of contacts.
4. Release of patient from isolation, instruction in regard to terminal disinfection, etc.
5. Diagnosis of the disease looked for in contact cases.

In each of the above measures the services of a trained nurse-assistant may be used to advantage. In the last named measure—the diagnosis of positive cases of the particular disease in contacts—I know that many physicians will say that nurses must under no circumstances make a diagnosis, and yet in many cities a sanitary officer (not a medical man) visits the homes, and in such "routine" cases his diagnosis is accepted without question; the school teacher or the school nurse may make a tentative diagnosis, referring the patient to the family physician; so the nurse-assistant to the epidemiologist may make her tentative diagnosis in just the same way, the individual case being always referred to the family physician, and any case exhibiting any irregular symptoms referred immediately to the Medical Health Officer.

Rather than deal at any length with generalities, I shall give you an account of the measures taken in a recent epidemic of German measles in an attempt to control the epidemic among the University students in the University of British Columbia; indicating the work of the nurse, as well as additional ways in which nurses might have been used if available; and also showing the results obtained from measures which were quite a departure from the routine quarantine and isolation measures.

During the first five months of the present year, January to May inclusive, there was an epidemic of German measles which seriously affected the school population of Vancouver and the neighbouring municipalities. The last epidemic of German measles in Vancouver had occurred during the winter of 1923-24, and as it was one which did not assume very large proportions, there therefore existed a large student body relatively non-immune to German measles. The epidemic started in the

city schools in January, but apparently no cases occurred amongst the University students until the latter part of January, and no case reported until the third week in February.

As soon as the presence of the first case of German measles and rumors of other cases in the University student body became known to the Campus Health Officer, Dr. H. W. Hill, Professor and Head of the Department of Nursing and Health, and Professor of Bacteriology, he at once took steps to attempt as far as possible to control the situation. This was, of course, no serious epidemic where fatalities might occur; even serious complications or sequelæ were unlikely, unless the eyes should be seriously affected; *time* was the chief consideration. The Spring examinations were only seven weeks away, and loss of time due to an attack of the disease (Provincial Health regulations placed the isolation period at 14 days) or loss of time to a student who should be placed in quarantine as a direct contact (this period set by the Provincial Health regulations as three weeks for non-immunes), loss of time from either cause, *i.e.*, isolation or quarantine, was a very serious consideration indeed to the University student.

In order to explain certain difficulties of the situation, it should be mentioned that the new University of British Columbia site is some seven and a half miles from the centre of the city, and over three miles even from the nearest city boundary; the Municipality of Point Grey adjoining the city separates the University lands from the city; it is "unorganized territory" and under the authority, therefore, of the Provincial Health Officer. The Campus Health Officer is in complete charge of all health matters within this whole unorganized area, and in particular may make, with the approval of the Provincial Health Officer, such health regulations as he may see fit to govern students and staff while within the University Reserve district. As there are no University dormitories, however, at the close of the day the whole student body, 1,591 in number, scatters; some going by private motor or motor bus and street car to their homes in the city or in the surrounding municipalities (1,050 of the students are of this group), while the remaining 541 live in private boarding houses or in fraternity houses, a fairly circumscribed boarding-house district having grown up in the Point Grey Municipality. The difficulty of keeping under supervision such scattered population was the greatest obstacle in putting any regulations into effect and required special arrangements.

The Campus Health Officer, with approval of Dr. H. E. Young, Provincial Health Officer, put into effect regulations which he had already experimented with on a large scale in the Army, *i.e.*, a plan of daily observation of contacts instead of quarantine, and also a shortened period

of isolation for the actual case, cutting the time in half by reducing the isolation period from 14 days to 7 full days. Lest the situation should get out of control, the understanding and cooperation of the students had to be obtained; and it seemed well worth-while to try the plan as the epidemic furnished an opportunity for further experimentation, which, if successful, would establish methods which would make it very easy to handle the situation should other diseases of a more serious nature at a future time occur.

The plan necessarily developed rapidly, as the first reported case of German measles was a student living in a fraternity house where there were *thirteen* other students. The student was sent at once to the City Infectious Hospital. Later in the day another case was reported from the same house, and rumors were heard of students, who had been observed to have rashes, who had been away for a few days and then returned to the University, and so on. Apparently already the seeds of the epidemic were sown. The fraternity house was visited; the other rumors were investigated and the names and addresses of contacts obtained.

As Director of the Vancouver General Hospital Laboratories, at the University only half of each day, the Campus Health Officer naturally could not attend to much of the detailed work in connection with the epidemic; provision to meet the emergency must be made and regulations must be made known at once to the student body. Dr. B. Blackwood, Health Officer for the Municipality of Point Grey, was appointed Assistant Campus Health Officer, and placed in charge of all visits of inspection of contacts in the Point Grey district. The resources of the Nursing Department were drawn upon for the routine work in the University itself; the writer undertook the observation of all suspicious cases, the keeping of detailed records and the release of cases; while the clerical assistant in the Department took charge of the reporting of all cases to the Provincial Health Department, and the notifying of the Vancouver City Health Department and the Health Departments of the neighboring Municipalities of students from homes in the various districts who had developed German measles, noting especially the fact of other contacts in the home of children of public or high school age. There was also the disposal of any cases developing during the day, which could not be permitted to return home in the crowded bus or street car, while the use of an ambulance at one dollar per mile (with students to be conveyed from two to fifteen miles) was practically prohibitive; to overcome this difficulty a student ambulance service was organized—and it might here be mentioned that so excellent was the technique observed by office assistant and student ambulance driver, both exposed many times very directly to infection, that, though both were non-immune, neither developed disease.

Having arranged for the personnel to carry on the work day by day

during his absence from the University, steps were taken by the Campus Health Officer to inform the students of the plan. This included giving the data necessary for the understanding of the nature of the disease, and the probable method of infection; and acquainting them with the regulations regarding the observation of contacts which was to take the place of quarantine. This was done through the student publication, the "Ubssey", and the regulations which went into effect were briefly:—

1. That each student upon *release from isolation* from an attack of *any* infectious disease, including German measles, must report immediately upon return to the University at the Department of Nursing and Health, in order to secure a certificate which would enable him to return to classes.

2. That during the prevalence of German measles, *all* students who had not attended classes for *two days or more* must upon return to the University report immediately to the Department of Nursing and Health, where again a certificate would be given enabling them to return to classes.

3. That all students (not previously immune) who, because of *exposure* to German measles would ordinarily go into quarantine, will be placed under daily *observation*, not during the whole three weeks (as given in the Provincial Health regulations) but *from the 14th to the 21st day after exposure*, during which period, if not immunized by a previous attack, they may come down with the disease at any time, and if they do, may at once infect other people.

4. This *observation* will consist of a daily inspection by the Assistant Campus Health Officer, Dr. B. Blackwood. This daily inspection will be carried out at the students' homes (if in Point Grey area) in time for the students, if clear, to attend their classes. Students residing in Vancouver must make similar arrangements with their family physician or other person such as a Public Health Nurse (which reports must be recorded with the Campus Health Officer), or else go into quarantine from the 14th to the 21st day.

Following the first case, no further students were sent to Hospital but were cared for in their homes or boarding places, and special mention must be made of the very excellent cooperation which was received from those who had taken students into their homes to board, in caring for the students as well as enforcing isolation. The very splendid cooperation of the whole student body must also be here recorded. While, as mentioned at the outset, there were undoubtedly several "missed" cases, and many cases who at first had gone back and forth in the crowded buses—not aware that they were exposing others to infection—yet with few exceptions the most excellent cooperation was obtained from the students. They indeed assisted in the early detection of many cases, and through their interven-

tion other conditions, especially skin lesions, were brought to light and the students concerned advised as to the benefits of securing the necessary treatment.

Many students visited the office to report symptoms which they feared might be suspicious, and others indirectly exposed to infection in class rooms or campus reported for inspection from the 14th to the 21st day as in the case of the more direct contacts in the homes. No student found it necessary to undergo a quarantine period in order to comply with the regulations. Students living in the city proper, or at a distance, were able to arrange with private physicians for inspection; others arranged for some student with a motor to drive them out to the University, when they at once reported for inspection at the Nursing and Health Department (over 30 contacts were inspected in this way during the quarantine period *i.e.*, the period in which they were likely to come down with the disease). The object effected was, of course, to keep each contact under expert supervision during the danger period, that chance infection of the group at large in the crowded buses might be avoided. Should the rash occur during the day, the student at once reported to the Department where provision was made to send the student home by the ambulance service, thus again limiting the number of contacts.

During the weeks of the epidemic, 192 cases were recorded. In the cases reported at once to the Nurse assistant a record of the symptoms observed was made; in the cases visited by the Assistant Health Officer or by private physicians, or not seen by a physician, notes, necessarily less accurate in detail, were made when the student reported for a certificate of release.

Forty-three cases were seen in the Nursing Department on the day the rash developed, of which some five or six had been under observation for several days; of this number the writer was particularly interested in noting the marked glandular involvement on the day of the rash, and in a few cases noted, and in many of the histories obtained note of, glands in cervical, mastoid or occipital regions as early as six days before the rash appeared; swelling in sub-lingual glands was noted in two cases, and in one was still present on return on the eighth day; a macular rash on the soft palate, showing even before the rash was plainly perceptible on face and neck, was also of interest. The fact that the rash was often well-marked on chest and shoulders, while only very faintly showing on neck, face and forehead, and also the very transitory nature of the rash in some cases, might very easily account for several missed cases.

Of the 43 cases observed on the day of the rash:—

31 cases—Showed involvement of mastoid, occipital, cervical, sub-lingual or sub-maxillary glands.

2 cases—No glandular swelling was observed.

10 cases—Earlier cases—no record made of glandular involvement.

3 cases—Under daily observation before rash appeared, glandular involvement was noted for 3, 4, and 5 days respectively, before the appearance of the rash.

2 cases—Under observation day before rash appeared, glandular swelling noted for 1 day.

6 cases—Reported glandular swelling noted for periods varying from 2 to 6 days, the time being quite definitely fixed in each case.

20 cases—Glandular involvement noted on day of rash, not noted earlier by the student, and students not previously under observation.

16 cases—There was a slight elevation of temperature on the first day of the rash varying from 99° to 99.8°, in only one case did the temperature reach 100° on that day.

In the remaining 149 cases, on reporting at the end of the isolation period, practically every case had noted glandular involvement, and in many cases students stated they had observed it for several days before the rash appeared.

Many questions suggested themselves to the writer, but one of especial interest, owing to the early involvement of the lymphatics, was whether the infection was transferable before the appearance of the rash. No case pointed definitely to a shorter incubation period than 14 days, though in one house (the first fraternity house under observation), contact cases in the house developed the rash within 6, 8, and 10 days. However, since a second case developed on the first day, a common "missed" source of infection must be granted; in two other cases the rash appeared on the 8th day, yet the possibility of earlier sources of infection could not be eliminated; in other cases the period was from the 14th to the 22nd day.

Is it possible however, that the incubation period is longer than the 14 to 21 days usually given, and that the period of infectivity dates from the very earliest symptom of glandular involvement, dating as noted five or six days before the appearance of the rash? This is, of course, a question for the epidemiologist, the public health nurse can only assist in securing the data. The large number of cases in which the eyes were affected is also worthy of note. A tabulation of the cases according to year and faculty showed very little variation in the percentage effected,

i.e., in the groups varying from 16 to 22 or 23 years, all ages proved equally susceptible. A checking up at the end of the term of doctor's certificates sent into the offices of the various deans, revealed seventeen additional cases, 5 of these had occurred during January thus forming, in part at least, the source of the epidemic since there had been no control of their release from isolation and no checking up of contacts, and 7 cases occurred at the close of the term, during the examinations, since these did not return to the University they were not therefore a source of infection to other students. In all 192 cases reported to the Nursing Department, with the 17 additional cases referred to, this made a total of 209 cases. 13.1% of the student body.

The attached diagram very clearly indicates the course of the epidemic—the rapid spread from the early missed cases, 27 cases developing during the first week of the recognized epidemic (*i.e.*, due to missed cases of 14 to 21 days earlier), while during the third week the number rose to 58. This was the peak of the epidemic; the numbers then fell by rapid lysis during the remaining five weeks of the term, that is, once the cases were isolated for the full period of 7 days, and contacts under supervision (though daily attending lectures), cases were detected very early and the epidemic at once controlled.

A detailed study of the 192 reported cases and the resulting contact infection is of interest. It must be remembered, of course, that the possibility of chance infection in street car, bus, class room, campus, etc., cannot be eliminated. In cases (as in the first fraternity house), where early cases occurring within a few days of each other evidently arose from the same source, such have not been included as resulting from the cases under isolation.

In 115 cases there were no student contacts in the homes. In the remaining 51 cases there were 5 concurrent cases of infection, *i.e.*, not cases of contact infection from the known sources, and 21 developing cases as indicated below:—

Homes and cases	Student contacts in each home	History of immunity from previous attacks	Cases of concurrent infection	Remaining susceptible cases	Number of cases developing	Percentage of susceptibles developing attack
34	1	10	2	22	5	23%
9	2	3	—	15	3	20%
1	3	—	—	3	1	33%
4	5	1	—	19	6	32%
1	8	—	—	8	—	—
1	9	—	—	9	3	33%
1	13	—	3	10	3	30%
51	105	14	5	86	21	Average 24.4%

While the results are not altogether satisfactory, 24.4% of susceptible contacts appearing a high average infection, yet it must be borne in mind that the 51 cases from which the infection developed were cared for in boarding houses, and the group concerned being a student body, strict isolation measures may not always have been observed, and there was the further chance of contact infection from unrecognized cases. The record of the home in which there were 8 contacts and in which no new cases developed was a splendid example of what can be done. The only group with which we can compare results is with the Public and High School population of Vancouver and Point Grey; while the groups differ somewhat in age yet the relative percentage of immune probably varied very little :—

	Percentage of infection	Loss of time to contacts
University students	13.1%	No time lost
Point Grey High School students	13.5%	2 weeks for each contact
Point Grey Public School students	21.2%	2 weeks for each contact
Vancouver High School students	3.9%	1 weeks for each contact
Vancouver Public School students	12.1%	1 week for each contact

(In Vancouver Public Schools the percentage of the infection varied from 1.2% in one school to 28.3% in another, and all the way between).

The results obtained among the University group do not compare very favorably with those in some of the High and Public Schools, though the total results are approximately the same, but it is to be remembered that there is as yet no Health Service in the University; this was just an emergency measure to meet an epidemic, while the Medical and Nursing Service in the Vancouver Schools was organized some 17 years ago. The work accomplished in some of the Vancouver Schools alone points the success of the nurse in epidemiology.

The main purpose, in this particular epidemic, was the saving of time to cases and to contacts:

In 192 cases there was effected a saving of 7 days each—1344 days (by reduction of isolation period from 14 to 7 days))	1911 days
In 91 susceptible contacts a saving resulted of (by substitution of inspection for 21 days quarantine)	3255 days or 8.9 years
Making a total saving of	3255 days or 8.9 years

Even reducing the quarantine period to 7 days (as carried out in the City Schools) thus reducing the time saved in the contact cases to 637 days, even this still results in a total saving of 1981 days or 5.4 years of

University student's time. Estimated in dollars and cents at the most conservative estimate of the potential value of student time, this would result in a large sum. Translated into the loss as recognized by the individual student in missing a week of lectures and laboratory work, the gain was well worth while.

The same method of observation of contacts in a limited number of cases of real measles and scarlet fever was successfully carried out, no new cases developing. The whole plan outlined hinges on the early detection of the first case and upon the most careful inspection of every contact. The study of individual cases and of contacts in the epidemic just described emphasized to the writer the advisability of daily inspection of contacts rather than quarantine, both as a means of saving time and also reducing the number of "missed" cases by the detection of transitory rashes and other signs easily overlooked by the untrained person. If it is a public responsibility to protect the public at large, in so far as it is possible, from chance contact with persons in the early, but infective, stages of acute communicable disease, only through the employment of a sufficient number of trained workers, can such a programme as the one described be carried out. The public health nurse with her knowledge of disease, her skill in the detection of symptoms, her accuracy in record keeping, and her recognized place as a home visitor, the nurse presents herself as the assistant most economically available in numbers sufficient to carry out an adequate programme for the control of communicable diseases.

Practical Public Health Unit for an Ontario Town*

By DR. B. J. HAZLEWOOD
Medical Officer of Health, Bowmanville, Ont.

To those of us who have been Medical Officers of Health for a period of 10 years or over, and who during the period preceding 1925—have organized a practical and efficient health unit in any of our Ontario towns, credit must be given for his efforts, a man must have had unbounding faith in the ultimate outcome, and must have been a super-optimist. Then we were working subject to the whim of the local Council whose personnel changed from year to year. It became necessary to enlist the services of the different social organizations and to put on an intensive campaign of education. This consisted of Public meetings with speakers, and music.

Child clinics presided over by some of our best physicians who devote their entire time to children's diseases. These clinics were assisted by Local Councils of Women, Ladies' Aids, etc., in the serving of afternoon teas was not the smallest part of the function.

I am sorry to say that some of our medical men were not in sympathy with the Campaign, were so short-sighted that they imputed selfish and sinister motives on the part of the Local M.O.H. This was very difficult to overcome, but I am sure that this was overcome in many cases, as it was in ours by showing the Local men that it was helpful to them and not a hindrance.

Since 1925 the position of the M.O.H. has been immeasurably improved by the advanced legislation, which has unified the dual nursing control—namely the Provincial Board of Health nursing unit and the Dept. of Education nursing unit, being placed under one head and the enabling act which gave to the Local Board of Health the power to appoint a P. H. nurse and later empowered the L. B. H. to pass a Milk Pasteurization By-law. Thus we are to-day in a comparatively ideal position to organize an efficient P. H. unit. At the same time we must have ever in mind that without public support our hands will be tied in a measure. Public health education through social clubs and organization will give the necessary support that a Local M. O. H. so much needs.

*Read before the Ontario Health Officers' Association, June 13, 1927.

Coming now to the organizing of the unit we have: 1st, Local B. H.; 2nd, M. O. H.; 3rd, Sanitary Inspector; 4th, Nursing service (school, community).

A brief outline of the duties of each will not be out of place and the proper co-ordinating of the work of each Dept. with the general scheme will be necessary.

The Local B. of H. is made up of the Mayor of the town, the M.O.H. and one man appointed by the Town Council.

The success of a public health unit depends in no small measure upon the Local B. of H. The Mayor by virtue of his office is a member of the B. O. H. Therefore, the selection of the 3rd member is very important. We always have a talk with the mayor and then meet the nominating committee of the local council and together we make a selection. If the M. O. H. has the confidence of the council his suggestion as to the 3rd member is generally taken, or if another member equally as good is suggested by the committee that person is chosen. The all important thing is to have the co-operation of the council in this matter.

The council also appoints the Sanitary Inspector. This appointment is almost as important as that of the M. O. H. In fact he is so important in the scheme of a successfully operating unit that he might well be called The Deputy M. O. H.—as suggested by Mr. White—our Provincial Officer of Sanitation.

The third member of the B.O.H. and the Sanitary Inspector having been appointed by the council we feel that we will have the backing of the local councillors in our work and this is very important, for, naturally complaints will be made to the council by individuals who feel they have a grievance against the Board of Health, Milk Vendors, creator of nuisances, etc.

The B. O. H. should at their first meeting appoint, one or more nurses according to the size of the town. In towns of from 2,500 to 4,000, one nurse will be sufficient to handle the school work as well as the community work.

The duties of a health unit in safeguarding a community may be enumerated as follows:

(1) The control of communicable diseases by the collection of reports, investigation and establishment of quarantine and to include the use of preventive measures for the known preventable diseases. This measure will best be carried out by an educational campaign, and by the collections of data by the community nurse, and by getting the written consent of parents or guardians in carrying out communicable disease prevention by inoculation, the inoculation being given to the school children first.

(2) Physical examination of all children to determine the existence of remedial defects and, by follow-up work, urge their correction. Instruction of teachers and public alike in the schools on the subject of personal hygiene and sanitation. This can be accomplished in the beginning by having the local medical men co-operate by giving part time at the school each day, giving each parent or guardian a choice of medical man, or in the large centres the M. O. H. may appoint certain medical men who will make the examinations for a small fee. The correction of defects may be and often can be accomplished in needy cases by the assistance of local service clubs. The follow-up work being under the supervision of the nurse.

(3) To encourage all persons by education and persuasive means, to be immunized against communicable diseases by the use of preventive measures.

(4) To promote the educational, medical-law enforcement for the control of venereal diseases.

(5) Conduct sanitary surveys of towns and make recommendations for improvement. This will be the duty of the Sanitary Inspector, the M. O. H. then placing the data before the local council and getting their co-operation in carrying them out.

(6) Outline plans for protection of public and private water supplies against pollution.

(7) Provide for safe and sanitary methods of sewage disposal at every home.

(8) Safeguard the production and distribution of milk supplies. This can only be done by a most thorough inspection of the source of milk supply, the correction of improper housing, feeding and care of milk cows. The correction of any defects in handling the milk from the cows to the consumer. This work should be carried out by an efficient sanitary inspector, one who knows his work. The Medical examinations of all who handle milk. The enforcement of pasteurization of milk or the demanding a milk supply from certified herds only. The proper inspection of Pasteurization plants is also very necessary, also the proper distribution of milk.

(9) To encourage physicians to report communicable diseases and aid in the collection of vital statistics.

(10) Provide facilities for the shipment of specimens to the laboratories. Or the establishment of a local laboratory under a competent pathologist, who may be a part time man. This will not be hard to do as all our younger graduates are well trained in this work and almost any one of them would be glad to devote part time to such work. This would

be ideal as you all know the time factor is so important in acute infectious diseases, and a medical man is more liable to act promptly, providing the means are at hand.

(11) Keeping always on hand a fresh supply of serums and anti-toxins.

(12) To encourage and aid in the establishment and maintenance of health centres and clinics. To establish health clinics and mother's conferences.

An outline of the daily routine of Bowmanville School and Community Nurse will probably give you a practical slant on the work and which could be adapted, with modifications, to your own use.

The forenoon is devoted to school work. A special room being provided in each school for the nurse. Here she makes her examination, keeps her records, assists the medical men in their examinations and checks up on all children who have been away for a period of 2 or more days. Each child examined, if a hazy history is given, the child is sent home and a health certificate requested. This checks up on mild cases of infectious disease and thus helps in checking their spread. A list of the names and remedial defects of the children is given to the M. O. H. and he places this with his recommendation before the local service club which co-operated last year to the extent of giving over \$800.00 toward the correction of these defects. The nurse in the meantime places the matter before the parents and getting their consent to having the work done.

The afternoons are devoted to calling at the homes of absentees from school and reporting any communicable diseases. The calling at homes where pre-school age children are ill and giving nursing advice and helps. She also calls on all prospective mothers and advises as to pre-natal care, strongly recommending them to keep in touch with their medical man. She gets a record of all births and calls at the homes and gives, where necessary, advice about the hundred and one little things so necessary to the comfort and welfare of the baby. Helps in preparation of food for the bottle baby, etc.

From 1.30 to 2.30 she is in her office in the town hall, to give advice and help. Once a week she holds a mother's conference, at the same place from 2 to 5. Babies are weighed and advice given. For larger centres this mother's conference could be changed to a Baby Clinic having in charge a competent medical attendant.

All this work has been so efficiently and tactfully done that the general public are co-operating wonderfully. The total result has been that the Infant Mortality has been reduced to 1/3 of what it was before the establishment of a nursing service three years ago.

Seven years ago we instituted an intensive Campaign against Diph-

theria, swabbing throats of all school children, quarantining carriers and giving prophylactic antitoxin, with the result that during the following years and up to the present time we have had not more than one case a year and no deaths.

This Campaign and its success helped more than any other thing in getting the co-operation of the public when two years ago we suggested immunization of all school children against Scarlet Fever, out of 485 school children we had consent to *Dick Test* and used Dick immunization in over 400, with the result that during the last two years we have had not one case of Scarlet Fever in a school child and only three cases imported. Careful quarantine of which with immunization of children prevented any other cases developing.

The Sanitary Inspector under the supervision of the M. O. H. should see that the town water supply is properly supervised, that frequent test samples be taken.

In all towns there are some parts that have not been reached by the water system. These have to depend on wells, all well water should be tested and the proper cleansing and purifying measures carried out and if the well is in too bad a state it should be abandoned.

The inspection and regulation of the milk supply, the supervision of the sale of perishable foods stuffs, and proper disposal of garbage and the supervision of the sewage system is part of the work of the sanitary inspector.

All this work if carried out properly must pre-suppose a working knowledge of sanitation on the part of the sanitary officer. Our Ontario towns are very much handicapped in this matter and the M. O. H. has in the past been forced to do most of the work or gradually educate the sanitary officer under him.

A move in the right direction is under way to provide a short course in sanitation for local officers. This, I believe is being promoted by the Minister of Health.

There are numerous other duties to perform almost too numerous to mention but as these duties arise I am sure the M. O. H. will cope with them successfully.

Certain Results of the workings of such a unit are bound to follow:

(1) Marked reduction in the loss of lives of expectant mothers and of babies during the first year.

(2) Obviate the precipitate closing of school by school authorities on account of the prevalence of a communicable disease, which means uninterrupted sessions during the scholastic year.

(3) Early discovery of the delinquent and defective school children and the proper placement of them in the educational curriculum.

(4) Interest and participation by a large part of the population in periodic physical examination.

(4) A marked reduction in the present high rate of typhoid fever, tuberculosis and venereal diseases, diphtheria, scarlet fever and other communicable diseases.

One more feature which in time I hope will be taken up by an efficient Health unit. "Health Education among adult groups".

The well adult may have 50 per cent. reserve, only feels slightly ill when he has used up most of his reserve and is living from day to day on the energy created on that particular day. If we would establish clinics for examination of all adults, incipient disease would be recognized and proper regulation of life would prevent break-downs and thus conserve to the community a 100 per cent. usefulness for a much longer period of time.

In conclusion I will quote from "Journal of Outdoor Life, August, 1926":

HEALTH EDUCATION

"In a recent address before the American Health Congress at Atlantic City, Dr. Livingston Farrand, President of Cornell University, sets a high standard of achievement in health education among adult groups. Any one looking over his ten cardinal points of health information that every intelligent adult person ought to know, must be struck with the fact that after a quarter century of work, the net result of health education is pitiful when measured by such standards. Has not the time come when the extensive campaign of education for adults must be greatly intensified by picking out key people in every community and honestly endeavoring to convey to them knowledge of the type here suggested?

Dr. Farrand's ten points as applied to the intelligent adult follow:

1. He should have a knowledge of the physiological basis for sound health habits, such as regular and sufficient hours of sleep, right posture, suitable exercise and proper elimination.
2. He should know the types and amounts and proportions of the various food elements essential to the proper nurture of his body.
3. He should have an acquaintance with the principles of normal mental action and the conditions underlying the more common variations from the normal state of mind.
4. He should have a general understanding of the sex instinct in man—its stages of development, its normal expression and the values and penalties attaching to it.

5. He should have a knowledge of the factors determining infection and resistance and of the principles of artificial immunization in the case of certain of the common infectious diseases.
6. He should have enough knowledge of the causes and prevention of the degenerative diseases to offer a prospect of passing through middle life without a breakdown.
7. He should know and therefore be armed against health hazards lurking in the environment, such as polluted water and milk supply, congestion in housing, poisonous dusts of certain industries, infected soil, etc.
8. He should appreciate the necessity for frequent medical and dental examinations.
9. He should have an intelligent basis for choosing wisely his medical and dental advisers, and for realizing that the modern practice of medicine is grounded on science, and not on mystery, fancy and tradition.
10. He should have a knowledge of the important health problems facing the community, of the methods of attacking those problems, and of the results to be expected from intelligent community action in the public health field.

—(*From Journal of Outdoor Life, August, 1926.*)

Tuberculosis and the Community*

DR. T. W. G. MCKAY,
Medical Officer of Health, Oshawa, Ontario

Of all those afflictions, to which mankind is heir, there is perhaps none, of which we have any record, that has taken greater or more persistent toll of humanity, throughout time, than the diseases due to Tuberculosis Bacilli.

Not only on account of its record of malevolence, during the known life period of man, but also on account of its spread of activity over the whole age period of the individual, it has forced its unwelcome notoriety upon all classes of society and many different kinds of peoples.

Just as "the old man of the sea" was the unwanted and immovable load upon the back of "Sinbad the Sailor" so has Tuberculosis been a soul-breaking yoke fastened upon the neck of suffering humanity. As man has risen-up out of the primitive earliest life, through the dawning of civilization, and acquirement of knowledge concerning himself and his strivings for existence, he has been compelled, more and more, to direct Promethean efforts, and with better concentration, as time went along, toward the relieving of his family from this staggering load and the bringing of himself from under the oppressive yoke.

It is within comparatively recent years that Science has placed before mankind a sufficiency of knowledge, relative to the life history of those organisms which are believed to be the active agents in the causation of Tuberculosis, as well as made a true reporting of the manifestations of the disease, which this organism gives-rise-to in man, and those other animals which have become so necessary to his existence and so intimately related to his environment.

The peculiar power of these organisms, causing an early condition of slow and insidious development of disease, exactly comparable to a very prolonged incubation period in other communicable diseases, and having occasionally an active early stage of disease, sometimes fulminant and striking hard, though more often blazing up only for a comparatively short time and then subsiding like a dying fire, deludes the sufferer into a false sense of security, wherein he is ready to believe the disease is dying-out rather than to appreciate it as, more rather, a banked fire, which may blaze out again and again and still again die down. This disease is capable of

*Read before the Ontario Health Officers' Association, Toronto, June 13, 1927.

carrying out an invaliding warfare over the major part of a lifetime, not mercifully killing at once, but seizing and dragging down, letting go again, and again re-seizing its victim. It's capable of crippling, maiming, and increasingly hampering the recuperative, as well as the earning power of the afflicted ones, and of jeopardizing the lives of family intimates and friends, of gradually stifling the ardour of youth, the insistence of effort, (in the prime of life), and the hope and trust of advancing years.

Well has it been called: "The Young Man's Curse, The Old Man's Friend." This disease plays with sentient beings throughout the whole gamut of individual human life. No age is secure from its onslaughts.

Virchow, the master pathologist, accepted it as an inevitable thing, when he pronounced:

"Nulla persona sine tuberculosa."

Yet out of his work and related works arose first, hope, then belief, in a promise of a future overcoming of this disease.

The intimacy of man's contact with this disease, over long periods of time, the realization of the many failures and futilities in the care of and the attempt to cure the disease, the sad knowledge of its devastating effect on, and the social detriment, to the home of the patient, the surety of its spread, in time, to others previously free from the infection, long ago forced this disease on the minds of men as a community and state problem, as well as a family responsibility.

Perhaps more than any other disease, Tuberculosis has forced humanity to look upon disease of all kinds, certainly all communicable diseases, from the national rather than from the individual aspect. Probably no other disease has so impressed man with the inadequacy of any attempt to control its direct manifestations and results, where no attempt has been made to guard others exposed to, but, as yet, not known to be possessed of the disease.

It would seem almost as if man had become so used to his association with Tuberculosis and that other social problem so intimately bound up with the whole of his life history, namely, specific disease, that he had accepted his Cross as inevitable, and ceased to further repine. In fullness of time sunlight has broken in on his mental darkness.

The brilliant and rather immediate results following the giving of observation, protection, and care to the contacts of tuberculosis cases, and also to those exposed in other ways to the danger of acquiring the disease, as well as the realization of the requirement of professional care, of readjustment to employment, of health education, for the afflicted, has definitely proven that concerted action against this disease, from the community aspect, from the State standpoint, is the logical outcome and the right perspective which must follow any right-intentioned study of in-

dividual cases of illness, their response to treatment and the results of the arrestment, or cure, of the disease, or of failure to respond at all.

The individual is undoubtedly, as a citizen, entitled to every conceivable, approved method of care in illness. His family, his community, the State, is just as much interested, though in a different way, as he himself is interested. The most important of all the attitudes to his disease are the economic, the reconstitution to citizenship, to labour, and to industry, as well as to his home life.

Krause has stated as a result of a study of the work done in the Cattaraugas County Campaign that it has been shown, definitely, "Consumption need not kill. The Sanitarium has been converted from a domicile of despair into a house of hope. The country doctor has been stimulated and has had the public health nurse put at his right hand as a helper."

Lawrason Brown of the Trudeau Sanitarium is quoted as saying: "If all boys and girls, during the ages from ten to twenty, can be examined annually, including X-Ray examination, ninety per cent. of the Tuberculosis of early adult life could be prevented."

Bovine Tuberculosis

Bovine Tuberculosis, with its diseased joints, its bodily deformities, its interference with the growth and happiness of childhood, its deadly and destructive influence on the health of older children and on their preparation for the struggle of existence, its fore-shortening of the term of life and of power to do, despite all the brilliance and cunning of surgery, of the nursing effort, of prolonged hospital and home care, of lavish expenditures of money, (which after all has achieved so little), has nevertheless, had to fade away like a mist before the rising sun, in the general acceptance, now apparent, of the value and the putting in practice of the idea of Tuberculin testing of cattle for the detection of the presence of Tuberculosis, with the subsequent elimination of reactors from milk herds, with the destroying of diseased animals and the destruction of their Tuberculosis tissues.

The delay necessary to secure such happy conditions as the elimination of Tuberculosis from a region, or country, has likewise through science, been made a negligible quantity, through the adoption of a practical method of destroying organisms of Tuberculosis, as well as other disease-causing organisms by the process of scientific pasteurization of all raw-milk and raw-milk products, before their being offered for sale or being used as food by the consuming public.

Time and trial have proved, absolutely, the value of these two aids to the prevention of Tuberculosis of the Bovine type, whether for the cattle themselves, or for those milk-fed animals, or animals raised in the same

stablings or on the same pasture, (which we humans make use of for food) or for man and his neighbours.

Community effort has been necessary to educe the proof, which it was known would surely be forthcoming. It needs, perhaps also, state insistence, short of coercion, to make the result universal.

Through methods such as these Bovine Tuberculosis will cease to be a consideration, either for animal or for man, and as a disease manifestation will cease to have more than a passing or academic interest.

The cost is in no way commensurable to the value of the human lives and human sufferings which have to be saved.

Human Tuberculosis

Just as surely as science has placed in our grasp these powerful and adequate means of control of Bovine Tuberculosis, so has science also granted to us a definite and sure means of control, and of gradual limitation of spread, and reduction of appearance, of Human Tuberculosis.

It is well known, that if it be deemed advisable, the material human milk, from Tuberculous mothers, may with safety be fed, in almost all cases, to nursing infants, under due restriction and protective care of the infant. The milk, if necessary, may even be drawn and pasteurized before feeding. Few infants or very young children acquire Tuberculosis until some considerable number of months have elapsed after the birth of the child. If such children and others, were properly safe-guarded, by ways which are now available, and are efficiently protective, a rapidly decreasing incidence of Human Tuberculosis would soon become apparent.

To go on awaiting the appearance of the individual cases of Tuberculosis, and the placing of them for care and treatment under Doctor, home, hospital, or sanitarium care, without taking interest in the physical state and the condition of health of the members of the same household or family; without surveillance of the play, school, work, travel, and recreation contacts, and every endeavour *then* being made to find them free from Tuberculous disease, or to cause them to be so at the earliest possible date, and then to prevent further danger of reinfection or relighting up of the disease, is not only poor medicine and disregard of scientific knowledge, but is also poor citizenship and absolutely disregardful of what the public conceives is the duty of the physician and those other specially educated individuals unto whom, under the Law, it has confided the care of itself and its dependents.

Treatment of the individual case of Tuberculosis, without at the same time giving heed to the necessity of care for the intimate contacts, is just as foreign to the modern understanding of what is best in the care and

treatment of Tuberculosis, as is the old-time medical treatment of Appendicitis, to modern surgical care.

Think for a moment, all you that have been thirty years or more in practice of medicine, of what the treatment of Appendicitis used to mean; treatment as a medical disease, by rest, opium, enemata, feeding, and avoidance of any surgical interference until abscess had formed, and compare that treatment with the modern appreciation of Appendicitis as a surgical condition requiring immediate operation, and not the awaiting of those complications with which Nature may try to trick Fate, yet, so frequently, ending with loss of life.

The average case of Tuberculosis, brought first hand to the care of the ordinary practitioner of medicine, is too often a well-advanced, seriously diseased, open case of Tuberculosis, freely excreting active organisms of the disease, and often with little or no regard for the rights of others, even if with a trained understanding of the duty to and respect for those rights.

The impersonal authority of the State must here intervene between its citizens to protect the rights of the many against those of the few, or of the one alone, and do so with proper humanity and the desire to serve well.

The tuberculosis individual is too often, and too evidently, a peace-time casualty with broken earning power and soon to become a responsibility, until death puts an end to suffering. Thank God, for that ever-present hope and optimism, so prevalent with these creatures, that seems to arise from the very nature of their disease and the toxic character of their infection.

The contacts of these tuberculars, at work, at play, at school, at recreation, are almost surely valuable citizens, easily to be saved to their community. These contacts are suitable for health examination and recommendation for physical welfare care, with every prospect of their being built up into useful, healthy citizens. The home contacts, the more intimate ones, even though tainted with the disease, may yet be salvageable and the disease detectable, in a stage yet so early as to be definitely curable, or arrestable. Thus may these lives be saved and Tuberculosis hampered in its stride. It is to these contacts our main endeavours should be directed. It is among these citizens that outstanding work may be done and shining results obtained.

To neglect these contacts, or to trust to the hopefulness of delay and sloth, or to hold-up action, in the fear of an unpleasant discovery of the presence of disease being made, is the sure way to end in disaster; to allow preventable illness to develop and spread and to prove that procrastination is the thief of human life, so far as preventable and communicable disease is concerned.

The modern conceptions of medicine in the minds of its practitioners are changing and have broadened, exceedingly, in their understanding of disease. We no longer are looking intensively inward to the individual case, to the protection of the one individual and the sacredness of his privilege of having to himself the luxury of disease, of whatever type he may please. We rather are looking constantly outward to see how best we may protect our or somebody else's loved ones, the unsuspecting and innocent bystanders, against malign disease and its consequences; the disease his neighbour has obtained. We acknowledge the right of every citizen to the fullest and freest protection against communicable disease.

TUBERCULOSIS

Calls	Active Cases	Suspicious	Deaths	Cases in San. & Hos.	
1920	11				
1921	23				
1922	163	36	19	24	
1923	244	63	6	10	21
1924	120	58	11	8	12
1925	143	51	26	11	15
1926	184	76	26	7	11

In 1925, Dr. Brink's Chest Clinic was held in Oshawa, at which 53 cases were examined.

16 suspect cases found.

In 1926, Dr. Brink's Chest Clinic was held, at which 70 cases were examined.

70 cases were examined.

23 active cases found.

27 suspect cases.

20 freed from suspicion.

It is interesting to note at this Clinic 13 cases were re-examined, in which 6 were freed from suspicion. 5 positive cases re-examined in which there were two apparently quiescent in a year's time. A few have shown definitely positive reactions to Tuberculin which were negative previously to the test. 2 showed negative Tuberculin reactions which previously showed positive.

In 1927 Dr. Brink's Chest Clinic was held, at which 103 cases were examined from the City.

36 were re-examined.

20 suspect cases.

17 positive.

30 freed from suspicion.

In the 36 cases re-examined, 11 showed no change from the previous year. 7 children have much improved. 10 were freed from suspicion.

As in the previous year, several have showed positive Tuberculin Tests, which were previously negative, and a few who were negative have resulted positive this time.

The cases who have been suspicious in all three Clinics, have had the recommendations carried out, such as keeping temperature charts for a certain length of time.

5 children have been kept from school several months, necessitating rest, fresh air, proper food, frequently supervised, tonsil and adenoid removal in most cases, when advised, weekly weighing at the Child Welfare Clinic, when possible—several given the privilege of Summer Rest Camp at the Lake

In the two latter clinics, the intensive work done has been with suspicious contact cases of active Tuberculosis. In several instances the active cases have been removed from the home to Sanitarium, or have died, a short time previous to examination of contacts.

The acceptance of the Public of the clinic service has been most commendable, revealing the knowledge that is constantly being taught, of prevention, which goes a long way in dealing with Tuberculosis problems in the municipality.

Medical Examination of Prospective Emigrants Overseas

The problem of immigration has been and is one of great importance to Canada; and the Department of Health, which acts in an advisory capacity to the Department of Immigration and Colonization in respect to the medical aspects of the Immigration Act, has found it one of the most difficult of the problems with which it has to deal.

The Department of Health is called upon to give advice to the Department of Immigration in two most important ways:—

1. Whether or not an immigrant upon presenting himself at a port of debarkation in Canada is physically and mentally fit to be admitted as a citizen of Canada;

2. Whether or not certain immigrants who have already been admitted to Canada and for some reason or other have not been successful here on account of some physical or mental defect, were in such a physical or mental condition at the time of their entry.

During the winter of 1921, a general medical roster was organized by Canada, Great Britain and Ireland, Australia, New Zealand, and South Africa; and any prospective emigrant who presented himself for medical examination to any one of these doctors, upon the payment of a certain fee, was given a medical certificate on which were noted all physical or mental defects. This certificate was then presented to the Director of European Emigration in London, who transmitted it to either of the two Medical Advisers of the Department of Health in London for perusal and concurrence, or otherwise. If, in the opinion of the Medical Adviser, the prospective emigrant was considered a physically and mentally fit subject, he was then permitted to embark for Canada. Unfortunately, however, this certificate could not always be relied upon, as in many cases, either through lack of medical knowledge or laxity on the part of the roster doctor, the emigrant's actual physical and mental condition was not accurately recorded. But this medical certificate did not give the emigrant assurance that he would be admitted to Canada as a citizen as he was again examined upon his arrival at the port of entry and, if any physical or mental defect was noted, he was held for further observation. If found physically or mentally unfit, he was immediately deported to his country of origin. This examination at the port of arrival was not as thorough as desired, as time and the means afforded would not permit of it. However, even with this cursory examination, many physically and mentally unfit emigrants were prevented from being

"officially landed" in Canada and were deported to their native country. This, of course, it must be realized, certainly inflicted great hardship on the emigrant concerned; and in many cases whole families had to be deported on account of one physically unfit member who should really never have been given a clear medical certificate before leaving his own country. Cases, such as this, naturally were a great deterrent to emigration as others from the same locality were reluctant about giving up their home ties, only possibly to meet the same fate upon arrival in this country.

To try to overcome the hardship which has heretofore been inflicted on many prospective emigrants there is now being established overseas an Immigration Medical Service. This Service will be composed of some twenty-five efficient and specially trained Medical Officers who will be assigned to duty in different parts of the Great Britain and Ireland and on the Continent of Europe, to whom any prospective emigrant may go for a thorough and efficient medical examination free of charge. Arrangements are also being made with the Department of Immigration and the different steamship companies for these Medical Officers to go to different localities at certain times as may be agreed upon, notice of which will be duly published in advance, where they will be prepared to carry out examination of any emigrants who may present themselves for same. In this way very little, if any, expense will be incurred by the emigrant. When the above scheme is in full operation in the early spring of 1928, it is hoped to reduce to a minimum the monetary burden, which the various provinces of the Dominion have had to bear, by preventing these physically and mentally unfit individuals from ever coming to Canada.

Radio Talk on Immunization

By DR. JAMES ROBERTS
Medical Officer of Health, Hamilton, Ontario

One of the most important features in the task of bringing health to the community by the application of the best principles of preventive medicine, is without doubt, the control of the communicable diseases of childhood.

Among these, Diphtheria has been in the past, and will be in the future, perhaps the greatest cause of death among our child population, unless, and until parents come to the realization that this is a preventable disease, preventable by immunization.

Perhaps a few facts about Diphtheria in our own city may assist my hearers to this realization.

In the five year period from 1915 to 1919 there were 1,001 cases of this disease, with the appalling total of 116 deaths. For the five years 1920 to 1924 the number of cases rose, with the rise in population, to 2,833 with 175 deaths.

In 1922 the Health Department commenced its campaign for the immunization of all children that could be reached through the medium of the schools, child welfare clinics, publicity by means of home visits by the department's nurses, and by press articles and posters.

As a result, some 5,000 of pre-school age and 13,000 school children have been immunized by the department's physicians, added to which, immunizations by private physicians would probably bring the total to some 20,000.

The astonishing decrease in this disease during the three years from 1925 to 1927, 363 cases with only 18 deaths, is the result of this vigorous campaign and has surpassed our fondest dreams. During the period from November 1st, 1926 to September 30th this year, only 10 cases of diphtheria were reported, with one death, which very probably was from septic sore throat, as the germ of diphtheria was not found.

Further argument is unnecessary to justify our previous statement that diphtheria is preventable.

Nor is the suffering and death of our children the only factor vital to the well-being of the community. There is the economic loss to be considered.

At a per-capita cost per pupil of say 50 cents per day of school at-

tendance, the financial loss of school funds during the years 1920 to 1924, occasioned by the absence from school of diphtheria cases and their contacts, would amount to more than \$60,000. Against this is the loss of only \$8,000, for the period 1925 to 1927, three years in which the immunization of children has brought about such a marvellous change. *I cannot in a short talk discuss the financial loss occasioned by needless deaths, nursing, doctor's and hospital bills, which would run into a fabulous sum.*

In view of the fact that the results of immunization have borne such abundant fruit, and for two most important reasons to the community, the saving of precious child life and the prevention of economic loss to the citizens at large, I would urge you in the interests of your own children, in the interests of the whole community, and in the interests of Public Health generally, to co-operate whole-heartedly with the department by interesting yourself in the immunization of your children against diphtheria.

The treatment is safe, with no harmful after effects to the child, is painless, just the prick of a needle, and above all is effective in the prevention of that greatest of scourges, diphtheria.

Nearly twenty-three years ago when I took charge of health work in Hamilton the population was less than half what it is now.

Our diphtheria hospital during the winter months was always overcrowded. Sometimes tents had to be put up outside in zero weather to accommodate patients. It was no unusual occurrence for the ambulance to be called at midnight to rush to the hospital some child choking in the agonies of laryngeal diphtheria.

Dr. Brown tells me that it was frequently necessary to insert a tube in the throat of desperate cases in order to prevent immediate strangulation.

No one feature of Public Health work was so distressing and discouraging to the health officer as to hear that such and such a child, only last week in the full pride of health and happiness, the delight of its parents, beloved by its playmates, had been stricken with diphtheria, leaving the home in gloom.

All this is changed. The diphtheria hospital is at the present time closed and uninhabited; no ambulance calls at the homes of sweet-faced, bright-eyed children; no tearful, anxious mothers waiting day by day the outcome of a diphtheria attack, whether a recovery with more or less permanent injury, or death by toxæmia, suffocation or paralysis.

What a happy condition of affairs for the children and the parents of Hamilton! What a source of satisfaction to the Health Department that we have been able to curtail the ravages of this terrible disease.

Is it not culpable, nay, criminal, for parents to continue a neglect of duty that may result in disaster to their offspring.

The Sanitary Inspectors' Association of Canada

FIFTEENTH ANNUAL REPORT OF THE EXECUTIVE COUNCIL YEAR ENDING JUNE 30, 1927

We have the honour to submit for the consideration of the members, this, the Fifteenth Annual Report of the Executive Council for the year ending June 30th, 1927.

The last Annual Convention of the Association was held in the City of Brantford, Ontario, on September 1st, 2nd and 3rd, 1926. We had an attendance of 18 at our Annual Business Meeting, and while this may not be considered large, it represents about one-fourth of our membership, and this is about as large a percentage as we might reasonably expect. In addition, we were favoured by having a number of visitors and friends during our Convention sessions, 37 persons having signed the register. The programme was one of the best we have ever had and covered most of the field of Public Health work. Two outstanding speakers on the programme were Dr. Amyot, Deputy Minister of Health to the Federal Government, and Dr. McCullough, Chief Officer of Health for the Province of Ontario. The Brantford City Council tendered a banquet to us at the Brantford Country Club and, after driving us in autos to Niagara Falls we were again their guests to lunch at the Clifton Hotel. We have already placed on record our appreciation of the kindness shown by the Mayor and Council of Brantford, but desire to record in this Report our thanks for favours received. We also wish to state that our old friend and fellow member, Mr. Glover, is deserving of great credit for the excellent arrangements made by him for our general comfort and convenience.

The following is a statement of our membership for the past two years:

At June 30th, 1926, our membership was—

Ontario.....	Members	7;	Assoc. Members	4;	a total of	11	
Manitoba.....	"	26;	"	"	3;	" "	29
Saskatchewan	"	7;	"	"	-;	" "	7
Alberta.....	"	8;	"	"	1;	" "	9
British Columbia....	"	14;	"	"	1;	" "	15

A total of Members..... 62; Assoc. Members 9; a total of 71

At June 30th, 1927, our membership was—

Ontario.....	Members 10;	Assoc. Members 6;	a total of 16
Manitoba.....	" 23;	" " 4;	" " 27
Saskatchewan.....	" 5;	" " 1;	" " 6
Alberta.....	" 5;	" " -;	" " 5
British Columbia....	" 13;	" " 1;	" " 14

A total of Members..... 56; Assoc. Members 12; a total of 68

It will be seen from the above that there is a decrease in membership of 3 during the past year. In the Province of Ontario there is an increase during the year of 5—4 new members and 1 transferred from Manitoba. Manitoba shows a decrease of 2—1 death and 1 transferred to Ontario. In Saskatchewan we have a decrease of 1 due to resignation and removal to address unknown. Alberta shows a decrease of 4 due apparently to lack of interest, this in turn being due in our opinion to the fact that for several years none of our members there have had the opportunity of meeting with us in Convention. We lost 1 member in the Province of British Columbia by death.

Once more the Grim Reaper has been amongst us, and it is with very deep regret that we have to record the loss by death of three very loyal and faithful members, Mr. A. J. Peckett of Port Arthur, Mr. Thomas Watson of Vancouver and Mr. C. W. Chisholm of Winnipeg. Mr. Peckett joined our Association in September, 1913, a few months after we had organized. Mr. Watson was called the father of the Association as he was one of the first, if not the first man to suggest the formation of the Association. In addition to having been President, Mr. Watson was deeply interested in everything pertaining to the welfare of the Association. Mr. Chisholm joined the Association in 1914, and although a quiet and retiring member, he was a regular attendant at all the Branch meetings.

We have continued our fraternal relations with the New Zealand Sanitary Inspectors' Association and the Sanitary Inspectors' Association of England. Both of these Associations are very much alive and doing a vast amount of good, not alone for their members but in general Public Health work. Much of their success is due to the splendid work done in the Branches.

As regards the future of the Association, your Executive Council begs to offer the following remarks and suggestions: We need a policy of decentralization. At present too much dependence is placed on the Executive Council for the progress of the Association. We must have National Association, for in union is strength. The Association, as a

whole, at its Annual Conventions can discuss matters of importance to Sanitary Inspectors, define policies and give instructions to the Executive Council which can then take up with governing bodies, legislative action desired, and can speak authoritatively for all the Sanitary Inspectors in Canada. The Conventions themselves are an important part of our educational work. They add prestige to the Association. Addresses and papers by eminent men are given and secured for future publication. The Association and its work is thus brought prominently before the public. We are already recognized as a factor in the Public Health of the country. This influence—not great at present—should be extended, and doubtless will be, when the Sanitary Inspectors throughout the Dominion become more fully aware of our aims and purposes. These objects, however, will never be fully realized solely by holding an Annual Convention once a year. Behind the Convention and its proceedings we need the individual work of each member. These members, although widely scattered throughout the Dominion, can materially assist in the following ways:

Provincial Branches. The Constitution provides that in every Province there shall be established a Provincial Branch with an Executive Committee consisting of the Provincial President (who is also a member of the Executive Council by virtue of his office as one of the Vice-Presidents of the Association), a Secretary-Treasurer, and three other members elected at each Annual Meeting of the Provincial Branch. This means that in the Provinces where we are already established, viz., Ontario, Manitoba, Saskatchewan, Alberta and British Columbia, there should be Provincial Councils busily engaged in furthering the work of the Association. They should secure the establishment of Local Branches at every place in the Province where there are enough members situated near enough to one another to make the holding of meetings a possibility. Once established these Local Centres or Branches should not be allowed to lapse or to get lukewarm but should be kept up to the mark by the encouragement and visitation of the Provincial Council. In matters affecting Health legislation for the Province, the Provincial Council should be an influence. It should watch all proposed legislation and take up with the Provincial Board of Health any suggested amendments. In doing so they should enlist the assistance of the Dominion Executive Council. Especially should they be alert in the matter of legislation affecting Sanitary Inspectors by demanding that proper training and qualification be required in the case of all persons in future appointed as Sanitary Inspectors or other Health workers, for recognition of Sanitary Inspectors as Technical Experts, and for suitable remuneration. Security of tenure of office should not be lost sight of. The establishment of Sanitary Districts in rural areas

and the appointment of properly qualified whole-time Sanitary Inspectors for such Districts, as advocated by this Association should be stressed, as also the matter of providing suitable facilities for the education, training and examination of the Sanitary Inspectors. The Provincial Council should, on the one hand, keep in close touch with the Dominion Executive, sending in full information of their activities for publication; and on the other with Sanitary Inspectors located at isolated points where they have little opportunity for keeping in touch with what is being done in Public Health work. These are some of the things which our Constitution intended that Provincial Branches, through their Councils, should undertake. This means that in each of the five Provinces already mentioned there should be at the present time a strong Provincial Branch carrying on an aggressive work in the Province. We should also get a footing in the other Provinces, viz., Quebec, Nova Scotia, New Brunswick and Prince Edward Island, where at present we have no members. Our hopes in this respect have not been as fully realized as they should have been. In the great Province of Ontario, where there should be the largest membership and the most influential Provincial Council in Canada, no Provincial Branch worthy of the name has as yet been established. In Manitoba the Provincial Branch makes the best showing of any Province, probably because the Head Office of the Association is situated there. Saskatchewan, once very active, has become very lukewarm, no doubt partly by the establishment there of the Association of Public Health officials. Alberta is not doing very much just now. Outside of Calgary and Edmonton the membership is scattered. Calgary and Edmonton are so far apart that it is perhaps difficult to maintain a community of interest amongst the members of these two Local Branches. There are other members in Alberta, but at isolated places. The British Columbia Branch is young and has not yet had much chance to show what it can do. Probably if the Association were to hold an Annual Convention at the Coast an impetus would be given to the work in that Province.

Local Branches or Centres. It has been said before, and we now repeat it, that the principal work of this Association should be done in the Local Centres. It is there that the members can get together to encourage, to stimulate, and help educate each other. Each Branch should have a winter programme. The assistance of Health Officers, the Medical Profession, and of others interested in Public Health work should be enlisted to make the meetings a success. The local press should be made use of, and the interest of the general public aroused by occasional open lectures arranged by the Branch. Non-members should be urged to join, lukewarm members wakened up, and backward members encouraged to express themselves either by giving papers

at the meetings or taking part in the discussion. All can contribute something. It is from these weekly or fortnightly meetings that bright ideas for increasing our usefulness should come. Free and informal discussion should be encouraged. Each Branch has Home Rule and full power to regulate its own affairs, subject, of course, to keeping close to the principles of our Constitution. This also applies to the Provincial Branches. Imagine a doubled membership and an active Provincial Executive in every Province of the Dominion with busy Local Branches at Halifax, St. Johns, Ottawa, Toronto, Hamilton, Winnipeg, Regina, Calgary, Edmonton and Vancouver. We appeal to every member of this Association who listens to this Report read, or who reads it when printed, to help make this vision a reality. We have done fairly well up till now but can do a great deal better. In other words, more "pep" is wanted.

Journal. With a widely separated membership such as ours an official organ is one of the most important means of keeping up the interest of the members and letting them know what is being done. In it we are able to publish many of the addresses and papers given at our Conventions. Our present official organ is the PUBLIC HEALTH JOURNAL. Our ultimate aim should be to publish a magazine of our own similar to those of the Sanitary Inspectors' Association of England and the New Zealand Association. Just now, however, there is a proposal made to reduce our annual subscription from five dollars to three dollars. If possible this is desirable, but it would appear that the only way in which this can be accomplished is by discontinuing the JOURNAL, which is at present supplied free to all the members. This proposed amendment to the Constitution will come before you at this meeting. If adopted, it will be necessary for us to consider some other means of supplying information to the members. Possibly a mimeographed Monthly News Letter would serve this purpose for a time, although in our opinion this would not be nearly so effective as the JOURNAL. We could not print papers and addresses, for instance. We ask your careful consideration of the amendment proposed.

Other sections of the Constitution will also be opened for possible amendment this year, notably the following: Section 5. To provide that persons who, at the time of their joining the Association, have served for five years as full-time health officials shall be eligible for full membership without their having a certificate. This does away with the age limit of 45 years. Your Executive does not recommend this amendment for adoption, but simply introduces it in order to permit of the discussion of the question of qualifications for full membership as against those for Associate membership. Section 29a. A new section intended to simplify the procedure in the case of suspensions. The idea is not to

permit members to get two or three years in arrears, and then expect them to pay up for this period—as a matter of fact they seldom do—but to suspend them promptly at the end of the year for which the subscription is unpaid, unless for good reasons further leniency should be shown. Re-instatement of such members is rendered much easier because they have only to pay the subscription for the year in which they make application for re-instatement. There are also a few minor amendments proposed in order to harmonize the Constitution.

In conclusion, we wish to express our sincere appreciation of the work done during the past year by our Branch Presidents, Secretaries, and all others who have assisted us in our work.

Our thanks are also due to Dr. Bates, Editor, and Miss Ferris, Secretary of the PUBLIC HEALTH JOURNAL, for the splendid service rendered us during the year. We have been allocated ample space for our articles and news jottings.

Appended hereto is the usual financial statement, duly audited by the auditors appointed at last Annual Meeting, from which it will be seen that at June 30th, 1927, there was a balance in the bank and on hand amounting to two hundred and sixteen dollars, seventy-nine cents (\$216.79).

Respectfully submitted,

E. W. J. HAGUE,
President.

ALEXR. OFFICER,
Secretary-Treasurer.

THE SANITARY INSPECTORS' ASSOCIATION OF CANADA

STATEMENT OF RECEIPTS AND DISBURSEMENTS, 1ST JULY, 1926, TO 30TH JUNE, 1927

<i>Receipts</i>		<i>Disbursements</i>	
To:		By:	
Balance in Bank and on hand at		Printing.....	\$ 34.35
June 30th, 1926.....	\$270.49	Mimeographing circular letters.....	8.02
Subscriptions received.....	255.00	Typewriting services.....	3.00
Interest on Bank Account.....	3.11	Honorarium to Secretary-Treasurer.....	100.00
		Expenses of Secretary-Treasurer attending Annual Convention at Brantford.....	125.00
		Sundry expenses in connection with Convention.....	12.80
		Postages and sundries to date.....	28.64
		Balance in Bank and on hand.....	216.79
	\$528.60		\$528.60

We have examined the accounts of the Treasurer of the Sanitary Inspectors' Association of Canada, from 1st July, 1926, to 30th June, 1927; compared the Cash Book with the vouchers and instructions and found the whole correct; and we certify the foregoing to be a correct abstract.

Winnipeg, Manitoba, July 8th, 1927.
(Signed) ALEX. BARCLAY,
H. H. MARSHALL,
Auditors.

Monthly Jottings of the Sanitary Inspectors' Association of Canada

The Fourteenth Annual Convention at Toronto, September 14th, 15th and 16th, was very successful and there was a large attendance—larger than at any previous Convention.

The sessions were held in the City Hall, and at the opening meeting Mayor Foster welcomed the delegates and gave an interesting talk on the progress of Health work. He was followed by Dr. J. G. Cunningham, of the Provincial Department of Health, who represented Hon. Dr. Forbes Godfrey, Minister of Health.

The programme of addresses and papers proved to be of a high order and led to most interesting discussions. The subjects were well varied and touched on many phases of Health work. The delegates had the opportunity of inspecting the Civic Refuse Destructor, a very fine installation of the Sterling type, the City Sewage Disposal works and the splendid Water Filtration Plant on the Island.

The various amendments to the Constitution of which every member received a copy were duly passed, including the amendment to reduce the subscription to \$3.00 per annum. The reports of the various Provinces were encouraging.

As a result of the Convention there seems to have been a disposition on the part of the Ontario Sanitary Inspectors to take a more active part in the affairs of the Association, as indicated by the fact that 14 new members were elected.

It was decided as a means of encouraging the growth of the Association not to insist on the possession of a certificate as a qualification for full membership during the next five years. The sections in the Constitution were not, however, altered and still remain as our standard of membership.

A strong Provincial Branch of the Association was formed by the Ontario Inspectors, Mr. A. R. White, Chief Sanitary Inspector for the Province being elected Vice-President for Ontario and, of course, Presi-

dent of the Ontario Branch. This Branch has already decided to hold a Provincial Convention in the City of Hamilton next September.

The following officers were elected:

President—Mr. E. W. J. Hague, Winnipeg, Man., re-elected.

Vice-Presidents:

Ontario, Mr. A. R. White, Toronto.

Manitoba, Mr. H. H. Marshall, Winnipeg.

Saskatchewan, Mr. W. H. Appleton, Saskatoon.

Alberta, Mr. J. B. Whiteoak, Calgary.

British Columbia, Mr. L. Robertson, re-elected.

Executive Council—Messrs. A. Rigby (Immed. Past Pres.), J. Arkle,

W. C. Millar, R. McQuillan, J. M. Jackson.

Auditors—Messrs. A. Aitken and B. C. Brough.

Secretary-Treasurer—Mr. A. Officer, Winnipeg, Man., re-elected.

The City of Vancouver was decided upon as the meeting place for the Dominion Convention in 1928.

The thanks of the Association are due to the Ontario Inspectors, Mr. Cusack, Mr. White and others, who helped to make the Convention such a success.

The above is a very brief account of the Convention. Later on a fuller report of the transactions will be published.



The Provincial Department of Health of Ontario

Communicable Diseases Reported for the Province by Local Boards of Health for the Weeks Ending September 3-10-17-24

COMPARATIVE TABLE

Diseases	1927		1926	
	Cases	Deaths	Cases	Deaths
Cerebro Spinal Meningitis.....	3	3	4	—
Chancroid.....	1	—	3	—
Chicken Pox.....	150	—	123	—
Diphtheria.....	246	23	239	18
Gonorrhoea.....	144	—	133	—
Influenza.....	1	2	6	—
German Measles.....	10	—	7	—
Measles.....	109	1	149	—
Mumps.....	118	—	15	—
Pneumonia.....	6	53	—	88
Poliomyelitis.....	10	1	22	—
Scarlet Fever.....	165	—	141	—
Syphilis.....	129	—	89	—
Small Pox.....	50	—	23	—
Tuberculosis.....	119	59	117	43
Typhoid.....	67	1	94	3
Whooping Cough.....	288	2	232	10
Diarrhoea.....	13	4	—	—
Dysentery.....	3	5	—	—
Erysipelas.....	1	—	—	—
Goitre.....	1	—	—	—

The following Municipalities reported cases of Smallpox:

North Gower 1, Ottawa 38, Marmora and Lake 1, Stratford 2,
Strong 1, Kitchener 2, Waterloo Tp. 1, Mt. Forest 1, Toronto 2, Weston 1.

News Notes

The material which follows, dealing with cholera infantum and infantile diarrhoea, comes from the Department of Public Health of Nova Scotia:

An examination of the Death Certificates for the month of August enables us to see how severely the colliery districts of Cape Breton County suffered from what has been a regular visitant, Cholera Infantum. There are records of forty deaths in Glace Bay from diarrhoeal disease. The deaths commenced to take place in the second week of the month, there being then eight deaths. In the third week the deaths numbered thirteen and eighteen died from that time to the end of the month. Sixteen children were under six months of age, ten were between six and twelve months, and fourteen were over one year old.

In New Waterford, there were seven deaths during the month and in Sydney Mines and Forence there were two (one in each place). It would appear that nearly one thousand children have died in that County of diarrhoeal affections since 1914.

These were almost wholly preventable deaths. That is a horrible record.

Montreal is said to have lost somewhat over 500 persons from Typhoid out of a population of 750,000. Glace Bay lost 40 out of a population of approximately 18,000. The Glace Bay death rate is more than three times and the New Waterford loss nearly twice as much as the Montreal rate.

In the smoking compartment of a car, coming up from Sydney the other night, some young men were singing, to the tune of "It ain't going to rain no more";

The rich man lives in a brown stone front,
The poor man lives in a shack;
And the miner lives in a "company" house,
With an outhouse at the back.

But that did not complete the picture. There were foul smelling drains and unclean yards, and flies by the myriads. Inside the house, there were bottle fed infants and mothers uninstructed and milk from dairies not properly inspected and often water insufficient for household

requirements and disease. And on the way to the cemetery there were the hearses, eleven funerals in one day, if the newspaper accounts are correct. And all that is required to stop the funerals is for the mothers to be thoroughly instructed and for the fathers to insist on the provision of the essential community services.

A very much argued question is that connected with the closing of schools in the presence of an outbreak of infectious disease. And the answer must usually be given after considering fully the pros and cons of the matter in each individual outbreak. There are some special features worth considering.

If the children are under careful observation at the school, with a teacher alive to the danger and a nurse in sufficiently close touch with all the departments of the school as to be instantly available when needed, there seems to be little necessity for closing the school. Under those circumstances any child likely to be of danger to its fellows will probably be immediately observed and may be removed from the school before other damage has been done. There will here be less danger of transmitting disease than if, the schools being closed, children are permitted to mingle without supervision in the movies or on the streets.

Professor G. Ramon of the Pasteur Institute, Paris, is at present a guest research worker in the Connaught Laboratories, University of Toronto.

The average drug store carries so-called patent medicines chiefly because a certain proportion of the public is misguided enough to demand them. As there is a much smaller profit on such goods than on most of the other merchandise carried, it would be to the druggists' advantage to abandon this general line were it not for incidental sales of a general character.

Few have the courage to do this, but a drug store in Spokane goes one step farther, according to the Health Messenger of Seattle, Washington, and actually advertises in its store windows:

"These Remedies Are An Insult to Public Intelligence."
"We consider This Class of Merchandise 'The Bunk'."
"When Ill, Consult Your Physician; Then Let Us Fill Your
Prescription For You With Drugs of Value."

This idea commends itself as a really new form of health education.
Medical Insurance
September 1927.

In accordance with the policy of the Department of Health to place twenty physicians in European cities as inspectors of immigrants about to leave for Canada, it was announced on October 4th that the following physicians had been selected for the posts: Dr. C. H. Archibald, Toronto; Dr. C. N. Arpin, Regina; Dr. G. Audet, Quebec; Dr. T. D. Bain, Toronto; Dr. J. L. Cook, Halifax; Dr. G. C. Currie, Regina; Dr. H. D. Delamere, Toronto; Dr. J. S. Douglas, North Bay; Dr. W. Egan, London, Eng.; Dr. G. B. Ferguson, Hamilton; Dr. J. E. Grant, Lockport, N.S.; Dr. C. E. W. Hames, Toronto; Dr. F. W. Leech, North Bay; Dr. W. B. McDermott, London; Dr. Margaret Parks, transferred from Immigration Medical Service, Quebec, to London; Dr. R. Rolland, Montreal; Dr. A. Turnbull, Flesherton; Dr. F. X. Duplessis, Paris, France (from Montreal); and Dr. A. Savoie, London.

It was announced that Dr. H. B. Jeffs, or Toronto, who now represents the Health Department as Medical Advisor to the Department of Immigration, has been appointed Chief Medical Officer of the new service, which will embrace Continental Europe and the United Kingdom. Dr. F. S. Parney, of Toronto, will act as his assistant.

Editorial

PROTECTING FUTURE GENERATIONS

If there are still those who are in doubt regarding the value of a Federal Department of Health, under the direction of a cabinet minister specifically assigned to that portfolio, it is suggested that they study the statement, published elsewhere in this issue, regarding the new regulations governing immigration insofar as medical examination is concerned.

This contains a very full statement of the Health Department's relations with the Dominion's Department of Immigration and gives an illuminating insight into the conditions which must have existed when there was no Federal Health Department to give advice on health problems.

Under the old system of medical examination, the prospective Canadian was passed by a doctor in his own land and the immigration authorities, in passing upon the question of whether this particular citizen was to be allowed to sail, had nothing but this doctor's report on which to base their judgment. It has long been admitted that these reports were unsatisfactory and not consistently reliable.

There was only one other opportunity of detecting physical disability or any other variety of unfitness which would prevent the immigrant landing and that was through, what may best be termed the "gang-plank examination".

Obviously, with newcomers coming ashore in a stream, the doctor attempting to make a thorough examination was confronted with an impossible problem. How, for instance, would he detect the presence of syphilis or any one of a number of other serious disorders, in the time at his disposal?

Under the new system, the would-be immigrant is thoroughly examined by a Canadian doctor before he leaves his own shores. The question of his physical fitness is settled before he purchases his steamship ticket and the hardships which the old system placed on the shoulders of the newcomer, in many cases, are eliminated.

But, aside from the fact that there have been, during the past ten years, some thousands of deportations of unfit immigrants and that the cost of these must have been considerable, it is only necessary to consider any example, such as the historic Jukes family, for instance, to realize what an important factor the health of the newcomer is and what an enormous effect it can have on future generations in this country. It is in this connection that the new regulations will, perhaps, be of the greatest service.

THEY'RE LOOSE ONCE MORE

The apostles of infectious disease are again on the trail with the avowed intention of overthrowing all established medical procedure. The system by which they expect to accomplish this extraordinary revolution is also a hoary method—by selling leaflets at 30 cents per thousand.

At the moment, their organization is called the "Anti-Vaccination and Medical Liberty League" but the bulk of its membership is made up of individuals who have been crusading for countless seasons for such things as complete vegetarianism, smoking on the street cars, raw milk, the right of the chiropractor to call himself doctor, the abolition of the present banking system and kindred causes. It also includes a number of Anti-Vivisectionists who last distinguished themselves in Toronto by attempting to persuade the citizenry that associates of a distinguished scientist were sneaking about the streets at night, stealing dogs from respectable homes and using them to carry on diabolical experiments in secret chambers at the University of Toronto.

It is in Toronto, once more, that this group of seasoned campaigners against anything that catches their fancy, has launched the first effort. Already, other Ontario branches are being formed, however, and it is the intention of those sponsoring this drive to prevent health, to extend their activities across the entire Dominion.

In Toronto, the campaign commenced with a display of literature in an otherwise empty store-front. Any physician will readily admit that there is likely to be a certain amount of passive resistance to vaccination in almost any community and had these earnest disciples of comic doctrines confined their efforts to railing against vaccines and serums, their progress might have been more marked. Though they still require watching on the part of health officers and health departments, they have broadened their field to include everything from diets to the use of herbs and accordingly, minimized the effect of their own teachings.

The literature which they had on display in Toronto was alike on one point only. It was agreed that all present conceptions of the ways to attack disease, as far as the medical profession is concerned, were incorrect. That one sentence practically sums up the entire work of this so-called "League".

As far as scientific data to back up their contentions is concerned, the Anti-Vaccinationists make use of the customary trick of taking a few words from their context and putting them forward as the expressed opinion of some medical man. They are thus in the unique position of attacking the theories and beliefs of the medical profession and backing up their claims by statements from members of the profession which they assert is astray.

In addition, they present, as scientific material, copious quotations from that widely-known but scarcely-respected tabloid, which is chiefly noted in this country because it was barred for a time, due to the daily obscenities with which it supplied its readers.

An amusing aspect of these activities, however, is the fact that the organization is apparently being used for somewhat mercenary ends by its own members. One faddist on foods accepts it as an opportunity to boom a restaurant which he controls and the none-too-subtle hand of the chiropractor is also present.

Aside from all these informative details of the manner in which these persons are going about what they are pleased to call their "task", the fact remains that they are apt to influence many people whose minds are ever open to half-baked ideas. It is a sad but undisputed fact that a moron, should he contract some infectious disease, can pass it on to others with as little trouble as anyone else. It is the less intelligent citizen who will be attracted by these curious conclusions concerning health and it is, moreover, the less intelligent citizen who contributes most handsomely to the creation of the problems with which the health officer is continually faced.

The belief, in the minds of these eager souls, that they are striving for "liberty" shows that their definition of the word is a peculiar one, to put it mildly.

Should they take as a slogan, Patrick Henry's famous sentence: "Give me liberty or give me death", they would, if their activities were completely successful, need to alter it slightly since there would be no choice between the two goals. They would automatically get the second, if they brought about their conception of the first.

